

SHANGHAI SUNRISE ELECTRONICS CO., LTD.

M1 THRU M7

SURFACE MOUNT
RECTIFIER

TECHNICAL SPECIFICATION

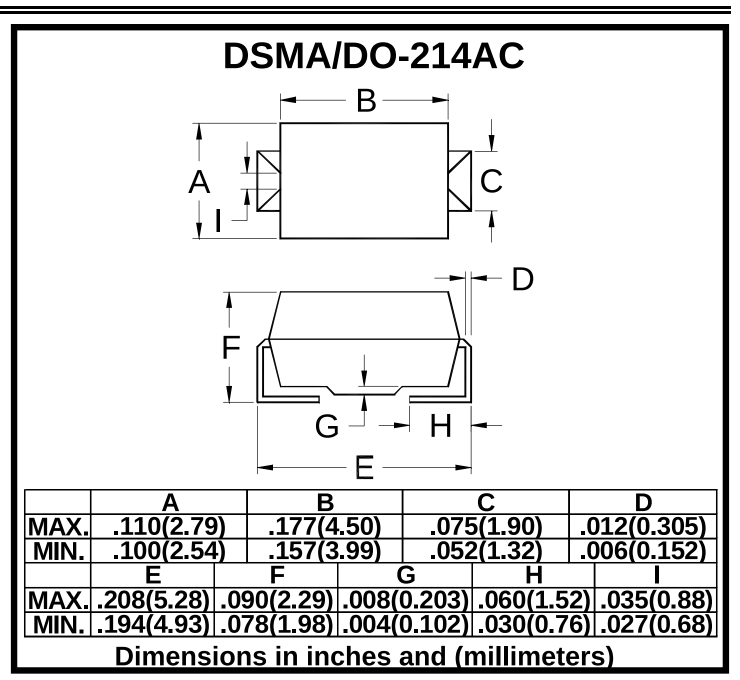
VOLTAGE: 50 TO 1000V CURRENT: 1.0A

FEATURES

- Ideal for surface mount pick and place application
- Low profile package
- Built-in strain relief
- High surge capability
- Open junction chip,silastic passivated
- High temperature soldering guaranteed: 260°C/10sec/at terminal

MECHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Color band denotes cathode



	A	B	C	D
MAX.	.110(2.79)	.177(4.50)	.075(1.90)	.012(0.305)
MIN.	.100(2.54)	.157(3.99)	.052(1.32)	.006(0.152)

	E	F	G	H	I
MAX.	.208(5.28)	.090(2.29)	.008(0.203)	.060(1.52)	.035(0.88)
MIN.	.194(4.93)	.078(1.98)	.004(0.102)	.030(0.76)	.027(0.68)

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	**M1**	**M2**	**M3**	**M4**	**M5**	**M6**	**M7**	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (T_L=100°C)	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage (at rated forward current)	V_F	1.1							V
Maximum DC Reverse Current T_a=25°C (at rated DC blocking voltage) T_a=125°C	I_R	5.0 200							μA μA
Typical Junction Capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta}(ja)$	27							°C/W
Storage and Operation Junction Temperature	T_{STG},T_J	-65 to +150							°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0V_{dc}
2. Thermal resistance from junction to terminal mounted on 5×5mm copper pad area